

benefit consumers and will not result in anticompetitive behavior⁸⁵, Kahn and Tardiff and Gordon point to the experience of markets where SNET and GTE operate as integrated carriers as evidence of the benefits of allowing ILECs to compete in interLATA services.⁸⁶ However, the most important lesson demonstrated by this experience is consumer demand for "one-stop shopping."

With the introduction of effective local competition, it will be possible to erase the artificial distinction between intraLATA and interLATA telephone service, and consumers will be able to flexibly purchase bundles of service from multiple carriers.⁸⁷ This combination will simplify consumer choices and will facilitate the development of innovative new services and more effective discounting programs, producing significant benefits for consumers. The success of GTE and SNET demonstrates the attraction of "one-stop shopping to consumers." However, in the current regime, consumers cannot choose among multiple suppliers.

Premature entry by a BOC into interLATA services is

⁸⁵ Earlier we cited evidence which suggests that SNET and GTE have behaved in an anticompetitive manner.

⁸⁶ See *Affidavit of Alfred E. Kahn and Timothy J. Tardiff*, note 5, *supra*, page 30; or, see *Affidavit of Kenneth Gordon*, note 4, *supra*, page 11.

⁸⁷ Kahn and Tardiff note that "competitors that can offer 'one-stop shopping' have a considerable competitive advantage over those that cannot." (See *Affidavit of Alfred E. Kahn and Timothy J. Tardiff*, note 5, *supra*, page 39.)

likely to make this situation permanent by affording the BOC an unfair advantage in competing for long distance traffic and by raising local entry barriers (as we described earlier). The only entry barrier facing SWBT -- but facing no other carrier who wished to compete in Oklahoma toll markets -- is the regulatory restriction embodied in Section 271 of the 1996 Act. Once this restriction is relaxed, SWBT can rapidly enter long distance services, making use of existing excess capacity in its local network where available and leasing bulk transport facilities in competitive long distance wholesale markets otherwise. In contrast, entry by an IXC into local service will depend on the successful implementation of the Section 251 unbundling provisions of the Act. We do not yet know whether these will be successful in eliminating the significant economic entry barriers that confront firms wishing to compete with SWBT in local service markets.

Similarly, Kahn and Tardiff cite the experience of cellular, paging, voice messaging services, intraLATA toll, and customer premise equipment markets to demonstrate the absence of anticompetitive behavior on the part of the ILEC.⁸⁸ First, these services are complementary to the LECs' core businesses of providing local access and telephony services. Until passage of the Act, these core businesses were not seriously threatened by

⁸⁸ See *Affidavit of Alfred E. Kahn and Timothy J. Tardiff*, note 5, *supra*, pages 31-34.

competitive entry and the LEC had less of an incentive to discriminate in adjacent markets. Second, a number of these services are premium services (e.g., cellular, paging, and voice messaging). Third, the LEC continues to earn excess carrier access revenues from these services which provides them an added incentive to stimulate demand for complementary services.

F. SWBT is unique in being able to offer effective long distance competition.

Kahn and Tardiff, Gordon, and Schmalensee all argue that SWBT is unique in its ability to offer effective interLATA competition and to deliver benefits of competition to low-usage customers. All agree that one-stop shopping will be attractive to consumers and will permit an integrated provider to realize scale and scope economies with respect to sales and marketing costs and corporate overhead. However, none of them adequately addresses the asymmetry in the challenges faced by IXC's integrating into local services and ILEC's integrating into long distance. While the former face formidable economic entry barriers, the latter are limited solely by the regulatory restriction against providing in-region, interLATA service. The challenge to introducing effective "one-stop" shopping competition is to introduce effective local competition. Until this succeeds, entry by an ILEC into long distance will give it an overwhelming and unfair competitive advantage; whereas, IXC's seeking to enter local services will not

have such an advantage until they demonstrate that they can compete effectively in local services. Therefore, SWBT is unique because of its monopoly control over essential bottleneck facilities.

G. The Threat of Anticompetitive Behavior by SWBT is Real and Supported by Economic Theory.

Kahn and Tardiff and Gordon argue that the anticompetitive dangers we identify in Sections III and IV are purely speculative. However, our earlier discussion cites examples demonstrating that the danger is real. SWBT experts argue that current regulatory safeguards against anticompetitive behavior are more than adequate to protect against future abuses. However, we have no experience enforcing unbundling and interconnection provisions which are as complex and as extensive as those required under the Act.⁸⁹ As noted earlier, with entry into in-region interLATA services, SWBT's incentives and ability to pursue anticompetitive strategies will increase at the same time that the regulatory challenge facing the Oklahoma Corporation Commission is becoming more complex. Under these circumstances, the entry restriction against in-region, interLATA participation by SWBT represents the least cost regulatory alternative to assure that

⁸⁹ While we believe that successful implementation of the unbundling provisions of the Act are necessary to promote effective competition, Kahn and Tardiff appear to disagree and imply that the Act went too far in its requirements. (See *Affidavit of Alfred E. Kahn and Timothy J. Tardiff*, note 5, *supra*, page 27-28.)

SWBT does not abuse its market power to harm the competitive process.

Both Gordon and Kahn and Tardiff offer a selective critique of potential anticompetitive strategies in an effort to demonstrate that these are not theoretically plausible. For example, Kahn and Tardiff argue that predatory behavior presumes that the LEC believes it could drive existing long distance carriers from the market.⁹⁰ This is incorrect. All that is necessary is that the LEC believe that by selectively harming IXC competitors it could prolong or extend its market power over local or long distance services. The emergence of effective local competition offers the greatest potential benefits to consumers, and consequently, the LEC's incentives and ability to hinder the emergence of such competition presents the gravest threat.

H. Estimates of significant gains from interLATA entry by SWBT are over-stated and based on erroneous assumptions.

Michael Raimondi presents estimates of the consumer benefits from interLATA entry by SWBT based on the well-known WEFA econometric model of the economy.⁹¹ When based upon appropriate

⁹⁰ See *Affidavit of Alfred E. Kahn and Timothy J. Tardiff*, note 5, *supra*, page 22.

⁹¹ Robert Dauffenbach and Edward Price merely endorse the WEFA analysis. They endorse the general methodology employed by the model but do not substantiate the assumptions underlying the WEFA base case or the "SWBT-entry" scenario. The anecdotal evidence they
(continued...)

assumptions, such econometric models are capable of generating useful insight into how changes in one industrial sector can have effects which propagate throughout the economy. Because telecommunication services are an essential input to virtually every productive activity in the economy, reductions in telecommunications prices generate large gains in economic well-being. Had the WEFA model been run with the assumption that local rates would fall by a similar amount as they assume toll rates will fall, the estimated benefits to Oklahoma consumers would be significantly larger. Conversely, if lower toll rates come at the expense of higher relative local rates (because competition is delayed), then the overall effect on Oklahoma's economy would range from zero to a large negative impact depending upon the input assumptions.

Therefore, the WEFA findings are and can be no better than the assumptions employed in the scenarios. Unfortunately, the WEFA report is not based on appropriate assumptions regarding either the base case or the "SWBT-entry" scenario. For example, WEFA simply assumes that SWBT entry will result in a further decline in long-run prices for long distance services of 25 percent (i.e., in addition to what would occur otherwise under the base

⁹¹ (...continued)

cite on the importance of information technology for the Oklahoma economy applies equally well to the base case and alternative scenarios, but says absolutely nothing about why SWBT entry would lead to further reductions in long distance prices.

case scenario). Because long distance prices already approximate economic costs, this assumption is incorrect. Consequently, the WEFA results shed no light on the issue of SWBT entry on consumers' well-being.

Furthermore, although the WEFA report did not adequately describe the assumptions included in the base case scenario (i.e., in which SWBT is not allowed to enter long distance services at this time), this scenario is likely extremely conservative regarding its forecasts about the improvements in productivity and prices which can be expected in toll markets in the absence of interLATA relief. As a result, the WEFA study attributes far more credit to SWBT's entry than is warranted. For example, the study assumes a dramatic increase in productivity growth of two percent per year due to interLATA relief, supporting this with ad hoc references to the trade press. Moreover, this same assumption seems to be a common one for WEFA because they used the same assumption to estimate the benefits of relaxing the MFJ line-of-business restriction on the BOCs in 1994⁹² and again to estimate the

⁹² See WEFA Group, *Economic Impact of Eliminating Line-of-Business Restrictions on the Bell Companies*, Bala Cynwyd, Pennsylvania, July 1994, page 14. Although the report was issued after the information services restriction was eliminated, it specifically noted (page 7) that the "recently granted information services relief is not reflected in the Baseline forecast."

benefits of interLATA relief in 1995.⁹³ Much of WEFA's justification for this assumption in its 1994 study disappeared once the line-of-business restrictions were relaxed, yet WEFA has not adjusted its scenarios to reflect these and other important changes to the base case scenario.

I. In Summary, While Benefits from SWBT Entry into Long Distance are Likely to be Small, Benefits of Increased Local Competition are Likely to be Large.

In summary, therefore, prices in long distance markets approximate economic costs. Because long distance markets are already effectively competitive, entry by an additional firm -- even SWBT -- will not have a significant effect on long-run prices. In contrast, however, one should expect significant gains from introducing competition to local services.

VI. SUMMARY AND CONCLUSIONS

The Telecommunications Act of 1996 is a landmark attempt to promote competition in all telecommunications markets. Recognizing the current state of local exchange competition, the Act contains broad instructions to promote competition in local

⁹³ See WEFA Group, *Economic Impact of Deregulating U.S. Communications Industries*, Bala Cynwyd, Pennsylvania, February 1995. For a critique of the WEFA analysis which applies as well to the most recent study, see R. Glenn Hubbard, *Economic Impact of Entry into Long-Distance Markets by Bell Companies: Response to the WEFA Study*, Mimeograph, Columbia University, May 1995.

markets and to deregulate. Around the country, state commissions are engaged in arbitrations to broker agreements between BOCs and entering competitors to ensure progress in local exchange competition. For the purposes of this proceeding, the Act also addresses competition in long distance markets. In particular, Section 271 of the Act seeks to identify and achieve criteria for the removal of restrictions against participation by BOCs in interLATA markets.

This affidavit addresses the following question: From an economic perspective, what are the appropriate preconditions under which interLATA relief for SWBT will be in the public interest? To answer this question, one must analyze two related sets of issues. The first set investigates and compares the current state of competition in markets for long distance services and markets for local exchange services. The second set investigates and compares potential gains and losses to consumers from interLATA relief for SWBT and other BOCs.

We address both sets of issues, with a goal of informing the Commission of the economic principles that should guide the decision to grant or deny SWBT the right to compete in interLATA markets. Two themes guide the analysis. First, while the removal of regulatory entry barriers is generally pro-competitive, premature interLATA relief is likely to be anticompetitive by raising local exchange entry barriers and threatening existing long distance competition. Second, the Commission should protect the

process of competition, not competitors; premature removal of the long distance entry barrier would harm the process of competition, while protecting SWBT.

At the broadest level, the principal points of our affidavit are two:

1. Long distance markets in general are already effectively competitive. Admitting SWBT and other BOCs as additional competitors will contribute little to long distance competition, and as long as they continue to control local monopolies, will likely harm competition in local exchange markets as well as the long distance market. Nothing in the submissions by SWBT affiants Robert Dauffenbach, Kenneth Gordon, Alfred Kahn and Timothy Tardiff, Edward Price, Michael Raimondi, and Richard Schmalensee in this proceeding causes us to alter this observation.
2. Local exchange markets are still effectively monopolized. Anticompetitive behavior by BOCs is unlikely to be restrained in the short-run by market-based competition. Further, regulatory restraint alone will be an inadequate safeguard against subtle anticompetitive practices. Permitting interLATA relief for the BOCs prior to there being effective local exchange competition enhances both the incentive and opportunity to engage in a range of anticompetitive practices. Given these points, our

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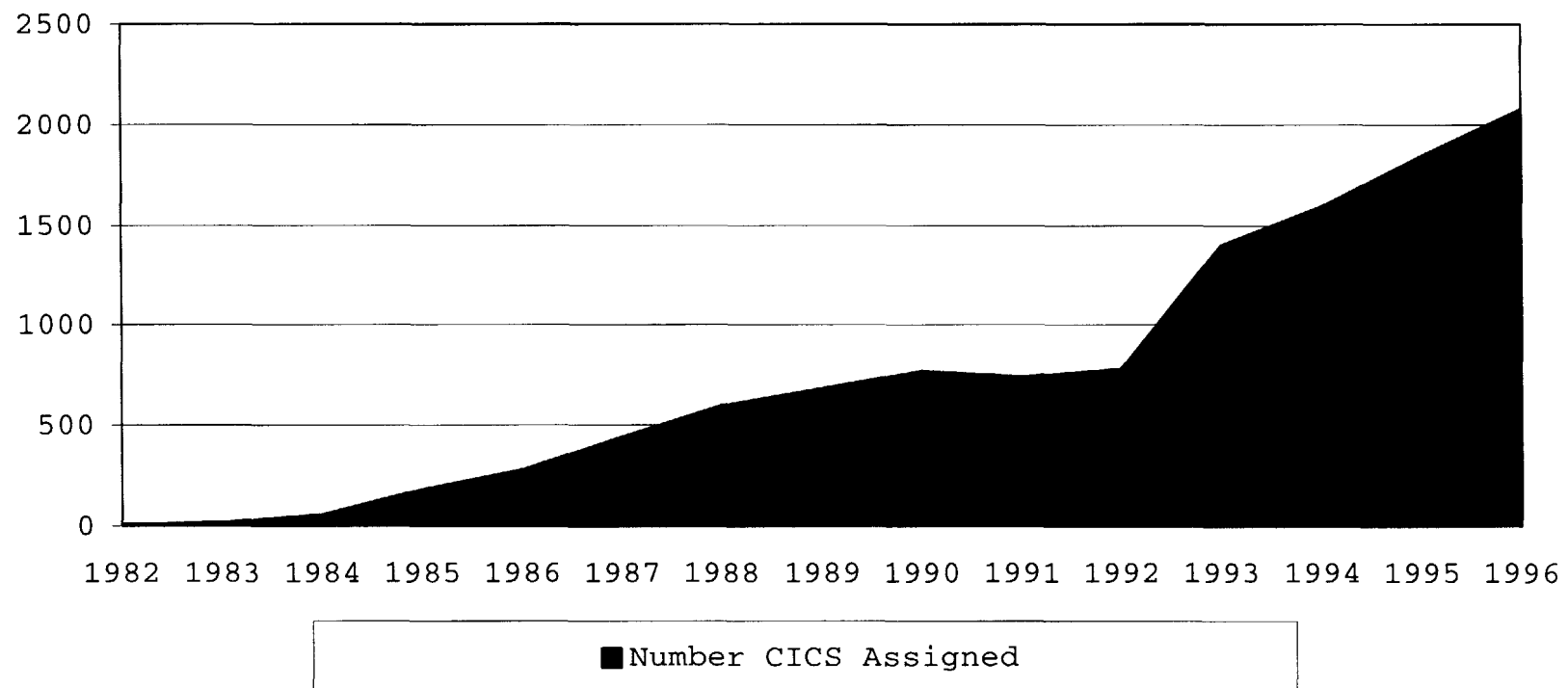
conclusion is that interLATA relief for SWBT should be postponed until the success of effective local exchange competition is assured. In the near term, SWBT entry is likely to impede competition in both local exchange and long distance markets, reducing gains for consumers and frustrating the competitive intent of the Telecommunications Act of 1996.

Figure 1: Composition of the Long Distance Industry, 1994¹

Tier by Annual Toll Revenue	Facilities- based	Resellers	Total	Share Toll Revenue (%)
Tier 1A: > \$5B	3	0	3	80%
Tier 1B: \$1B-\$5B	2	0	2	6%
Tier 2: \$100M-\$1B	9	1	10	3%
Tier 3: \$15M-\$100M	73	57	130	8%
Tier 4: \$5M-\$15M	120	128	248	3%
Tier 5: <\$5M	196	270	466	<1%
Total	403	456	859	100%

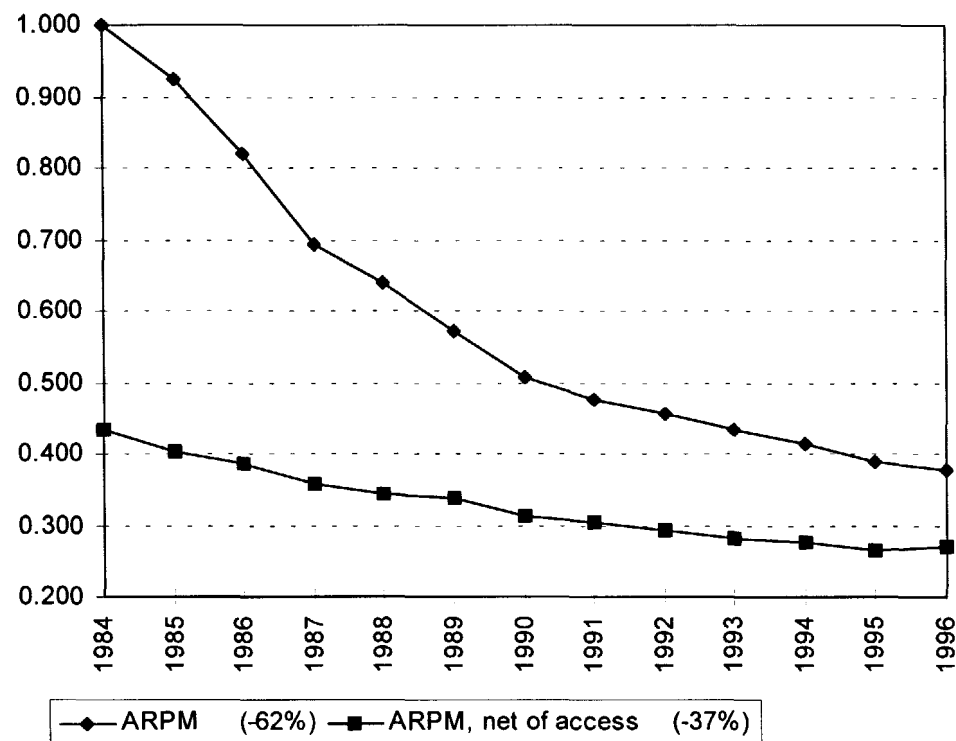
¹ Source: Salomon Brothers, *U.S. Telecom Services*, April 17, 1996, page 19.

Figure 2: Carrier Identification Codes Assigned¹



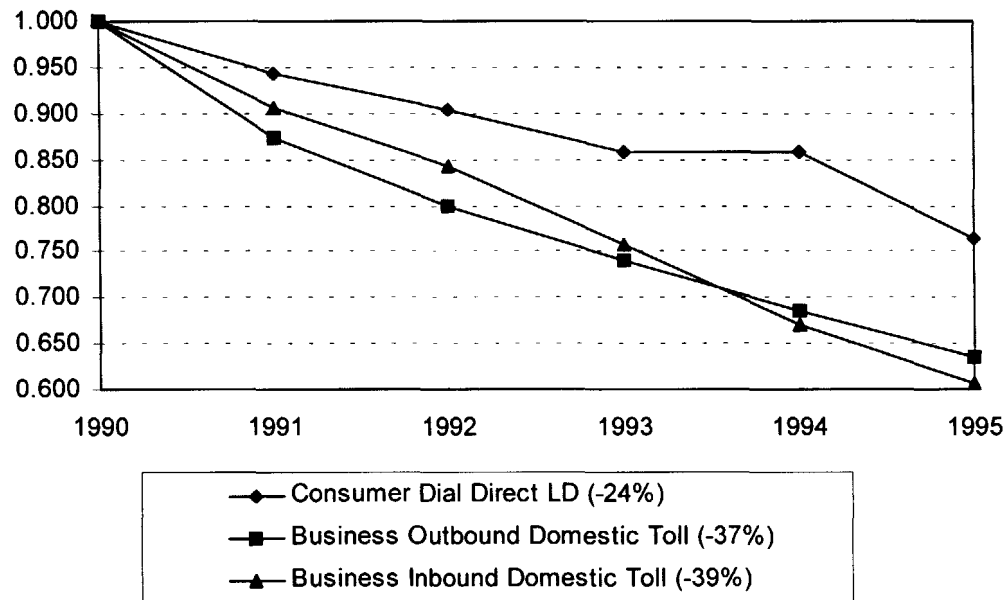
¹ Source: Federal Communications Commission, *Statistics of Communication Common Carriers*, 1995/1996 Edition, Table 8.13.

Figure 3: AT&T Pricing -- Real Growth in Switched Interstate Toll Service
(ARPM Index 1984 = 100)¹



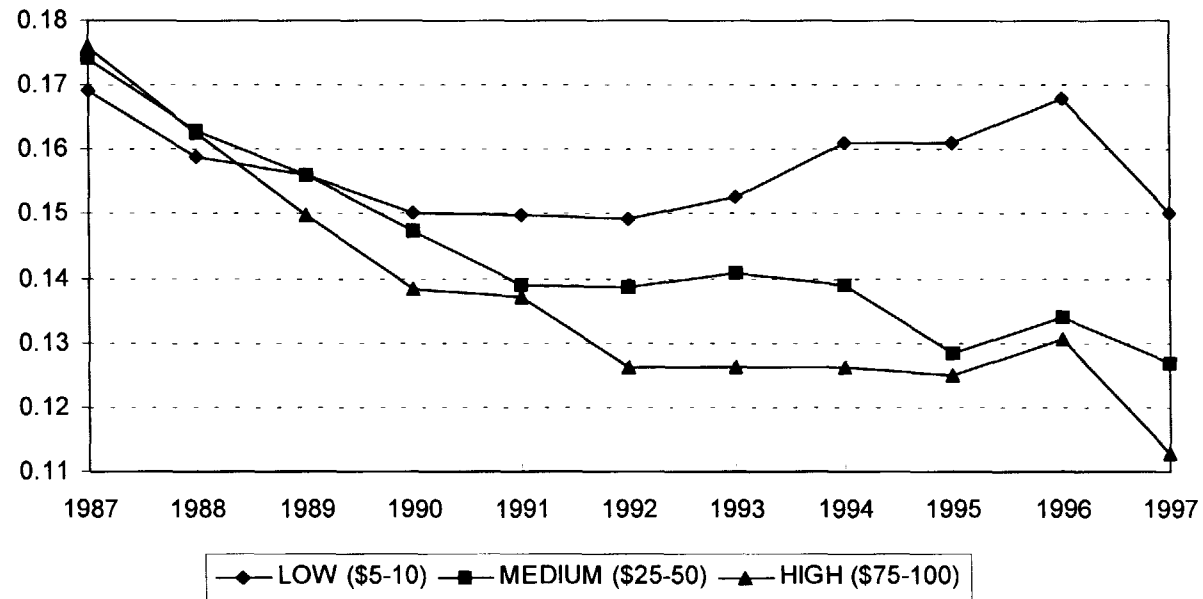
¹ Price indices for Average Revenue Per Minute (ARPM) and ARPM net of access are based on proprietary AT&T data for all switched interstate services. The nominal price data were converted to a constant 1984 dollars using the implicit GDP deflator reported by the Bureau of Economic Analysis in the *Survey of Current Business*.

Figure 4: AT&T Pricing -- Real Growth in AT&T Switched Services
(ARPM Index 1990 = 100)¹



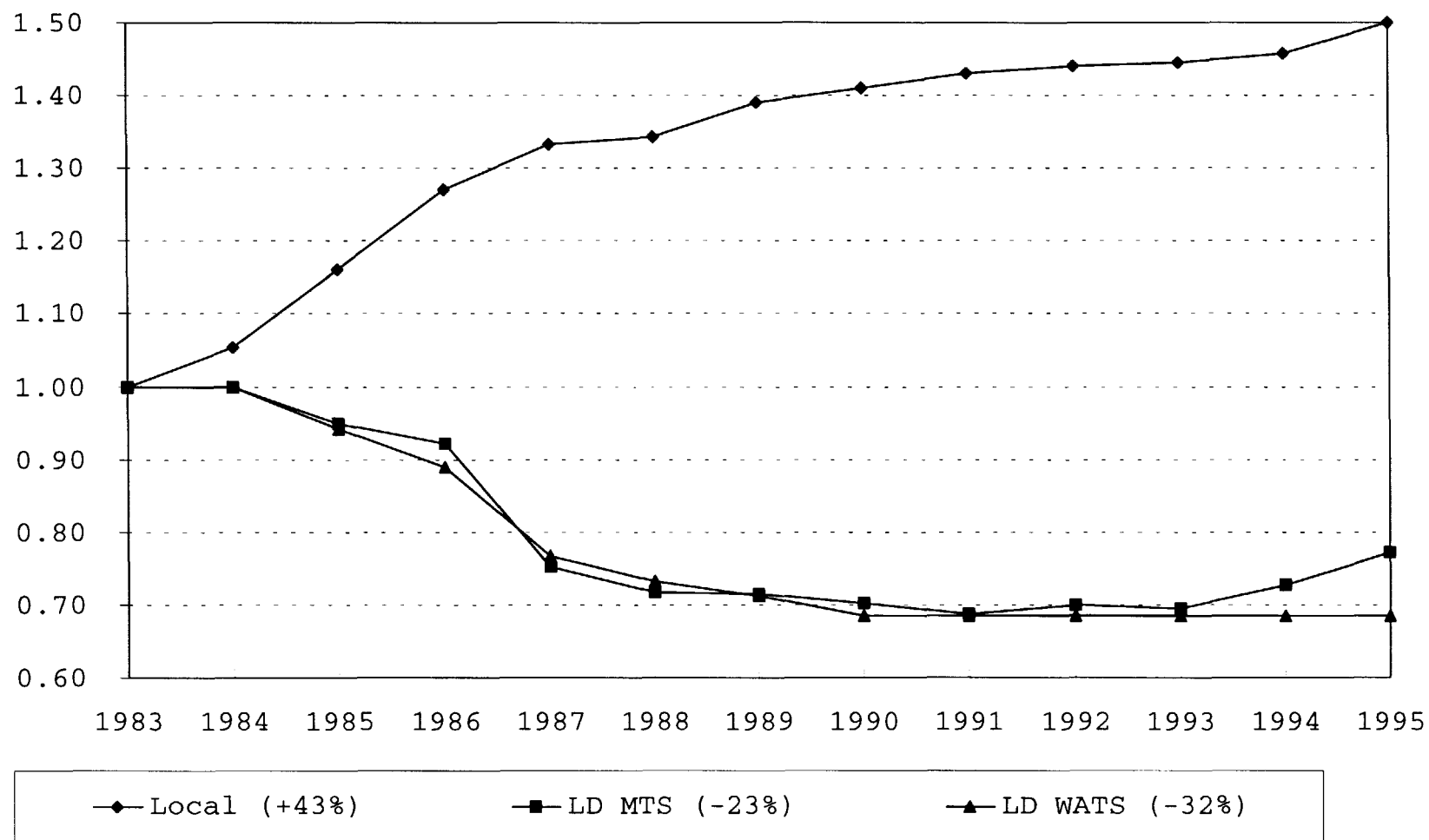
¹ Price indices for Average Revenue Per Minute (ARPM) for Consumer Dial Direct Long Distance, Business Outbound for Domestic Toll and Business Inbound for Domestic Toll are based on proprietary AT&T data. The nominal price data were converted to constant 1990 dollars using the implicit GDP deflator reported by the Bureau of Economic Analysis in the *Survey of Current Business*.

Figure 5: AT&T Pricing by Usage Category Dial-1 Offer Price History
(\$/minute)¹



¹ Prices for best offer prices are based on AT&T tariffs applicable to customers in each monthly usage category. This chart was prepared by Thomas Brand of AT&T, January 1997.

Figure 6: Telecommunications Producer Price Indices¹



¹ PPI Index in 1983=100. Source: Federal-State Joint Board, *Monitoring Report*, CC Docket No. 87339, May 1996, Table 5.6.

Figure 7: Income Statement Accounts for AT&T, 1988-1994
 (\$ per switched conversation minute)¹

Acct#		1988	1989	1990	1991	1992	1993	1994
	Share LD revenue switched ²	86%	88%	88%	89%	89%	90%	90%
	LD Revenue (excl private) ³	0.239	0.221	0.205	0.198	0.192	0.18	0.181
5300	Uncollectibles	0.005	0.006	0.005	0.006	0.007	0.00	0.005
650	Total Plant Specific Operations	0.024	0.019	0.018	0.018	0.013	0.01	0.012
	Other non plant specific ⁴	0.012	0.011	0.010	0.007	0.009	0.00	0.008
6540	Access	0.013	0.092	0.085	0.079	0.074	0.07	0.065
6560	Depn and Amortization	0.016	0.019	0.017	0.018	0.012	0.01	0.013
690	Total Non specific Plant Opns	0.141	0.121	0.112	0.104	0.095	0.09	0.086
700	Total Customer Operations	0.034	0.034	0.032	0.032	0.031	0.03	0.034
710	Total Corporate Operations	0.020	0.020	0.010	0.021	0.029	0.02	0.019

% of switched long distance revenue

Acct#		1988	1989	1990	1991	1992	1993	1994
	LD Revenue (excl private)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
5300	Uncollectibles	2.0%	2.5%	2.5%	3.2%	3.7%	3.1%	3.0%
650	Total Plant Specific Operations	10.0%	8.6%	8.6%	9.2%	6.7%	7.0%	6.5%
6540	Access	47.4%	41.4%	41.4%	40.1%	38.7%	37.6%	35.9%
6560	Depn and Amortization	6.5%	8.5%	8.5%	8.9%	6.2%	6.2%	7.2%
700	Total Customer Operations	14.3%	15.5%	15.5%	16.4%	16.2%	18.4%	18.6%
710	Total Corporate Operations	8.5%	8.9%	8.9%	10.4%	15.2%	14.1%	10.4%

¹ Source: *Statistics of Communications Common Carriers*, Federal Communications Commission, 1988-1994, Table 2.9. The measure of switched Conversation Minutes of Use (CMOU) is based on proprietary data provided by AT&T for all interstate and intrastate services. Costs per minute are based on the share of long distance revenue switched times the appropriate expenditure category divided by the CMOU.

² The share of long distance revenue switched equals long distance revenue (excluding private) divided by LD network service revenues. Long distance revenue (excluding private) is the estimate of switched long distance revenue (=Acct 525 - Acct 5120).

³ Long distance revenue (excluding private) is estimate of switched long distance revenue (=Acct 525 - Acct 5120).

⁴ Other non-plant specific costs are given by Acct 690 - Acct 6540 - Acct 6560.

I certify that the statements and analysis presented within are accurate to the extent of my knowledge.

Robert Glenn Hubbard
Robert Glenn Hubbard

Signed and sworn before me this 28th day of April, 1997:

Florence J. Grant
Notary Public

FLORENCE J. GRANT
Notary Public, State of New York
No. 31-4666482

My commission expires: _____


Qualified in New York County
Commission Expires March 30, 1998

I hereby swear, under penalty of perjury, that the foregoing
is true and correct, to the best of my knowledge and belief.



William H. Lehr

Subscribed and sworn before me this 28 day of April, 1997.


Notary Public

My Commission expires: _____
Joanne M. Ribeiro
NOTARY PUBLIC
~~My commission expires~~
January 8, 1999

ATTACHMENT 1

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Curriculum Vitae

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PERSONAL DATA

Born: September 4, 1958, in Orlando, Florida.
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FIELDS OF SPECIALIZATION

Public Economics, Macroeconomics, Corporate Finance and Financial Institutions, Industrial Organization,
Natural Resource Economics, Public Policy.

EDUCATION

Ph.D., Economics, Harvard University, May 1983.
Dissertation: *Three Essays on Government Debt and Asset Markets*, supervised by Benjamin M. Friedman,
Jerry A. Hausman, and Martin S. Feldstein.

A.M., Economics, Harvard University, May 1981.

B.A., B.S., Economics, University of Central Florida, June 1979, *summa cum laude*.

HONORS AND AWARDS

Exceptional Service Award, U.S. Department of the Treasury, 1992.

Distinguished Alumnus Award, University of Central Florida, 1991.

John M. Olin Fellowship, National Bureau of Economic Research, 1987-1988.

Teaching Commendations, Graduate School of Business, Columbia University.

Northwestern University Associated Student Government Teaching Awards, announced in 1985, 1986, and
1987.

Graduate Distinctions: National Science Foundation Fellowship, Alfred P. Sloan Foundation Fellowship.

Undergraduate Distinctions: National Merit Scholarship, National Society of Professional Engineers Award,
Florida Society of Professional Engineers Award, National Council of Teachers of English Award, Omicron
Delta Kappa, Financial Management Association Honor Society.

POSITIONS HELD

1994-present	Senior Vice Dean, Graduate School of Business, Columbia University.
1994-present	Russell L. Carson Professor of Economics and Finance, Graduate School of Business, Columbia University.
1988-1994	Professor of Economics and Finance, Graduate School of Business, Columbia University.
1995-present	Visiting Scholar and Director of Tax Policy Program, American Enterprise Institute
1994	MCI Fellow, American Council for Capital Formation.
1994	John M. Olin Visiting Professor, Center for the Study of Economy and the State, University of Chicago.
1991-1993	Deputy Assistant Secretary (Tax Analysis), U.S. Department of the Treasury.
1987-1988	John M. Olin Fellow in residence at the National Bureau of Economic Research.
1983-1988	Assistant Professor of Economics, Northwestern University, with half-time research appointment in the Center for Urban Affairs and Policy Research.
1985	Visiting Scholar, Center for Business and Government, John F. Kennedy School of Government, Harvard University.
1981-1983	Teaching Fellow (Department of Economics) and Resident Tutor in Economics (Dunster House), Harvard University.

PROFESSIONAL ACTIVITIES

1987-present	Research Associate, National Bureau of Economic Research (Monetary Economics, Corporate Finance, Public Economics, Economic Fluctuations, Industrial Organization).
1995-present	Member, Board of Academic Consultants, American Law Institute
1994-1996	Member, Economics Grants Panel, National Science Foundation.
1993-present	Panel of Economic Advisors, Federal Reserve Bank of New York.
1993-present	Board of Advisors, Institutional Investor Project, School of Law, Columbia University.
1993-present	Member, Federal Taxation and Finance Committee, National Tax Association.
1990-present	Co-organized research program on International Aspects of Taxation at the National Bureau of Economic Research, Cambridge, Massachusetts.
1995	Member, Program Committee, American Economic Association Meeting
1983-1987	Faculty Research Fellow, National Bureau of Economic Research.

- 1983-1986 Adjunct Faculty Research Fellow, Energy and Environmental Policy Center, John F. Kennedy School of Government, Harvard University, Cambridge, Massachusetts.
- 1986, 1988, 1994 Member of the Brookings Panel on Economic Activity.
- 1985, 1987 Special guest of the Brookings Panel on Economic Activity.
- 1990-1991 Organized research program on Environmental Economics and Public Policy at the National Bureau of Economic Research, Cambridge, Massachusetts.
- 1988-1990 Co-organized research program on Dynamic Models of Firms and Industries at the National Bureau of Economic Research, Cambridge, Massachusetts.
- 1985-1989 Organized research program and workshops on contracting in financial markets at the Summer Institute, National Bureau of Economic Research, Cambridge, Massachusetts.
- 1988 Organized Economic Fluctuations program on Industrial Economics and Macroeconomics, National Bureau of Economic Research, Stanford, California.
- 1986-1988 Organized research program and workshop on links between macroeconomics and industrial organization at the Summer Institute, National Bureau of Economic Research, Cambridge, Massachusetts.
- 1991 Member, Program Committee, Econometric Society Winter Meetings.
- 1982-1983 Member, Energy Modeling Forum VII Study Group, Stanford University, Stanford, California.
- 1981-present Consultant on research projects with private corporations and government and international agencies, including the Internal Revenue Service, Social Security Administration, U.S. Department of Energy, U.S. Department of State, U.S. Department of Treasury, and U.S. International Trade Commission; National Science Foundation; The World Bank; Board of Governors of the Federal Reserve System; Federal Reserve Bank of New York; Congressional Budget Office.
- Member: American Economic Association, American Finance Association, Association for Public Policy and Management, Econometric Society, International Association of Energy Economists, National Tax Association, the Royal Economic Society, and the Institute for Management Science.
- Referee: *American Economic Review; Canadian Journal of Economics; Columbia Journal of World Business; Econometrica; Economic Journal; Energy Economics; Energy Journal; Journal of Business; Journal of Business and Economic Statistics; Journal of Economic Literature; Journal of Finance; Journal of Financial Economics; Journal of Financial Intermediation; Journal of Financial Services Research; Journal of Industrial Economics; Journal of International Money and Finance; Journal of Law and Economics; Journal of Macroeconomics; Journal of Money, Credit, and Banking; Journal of Monetary Economics; Journal of Political Economy; Journal of Public Economics; Journal of Small Business Finance; Management Science; National Tax Journal; Quarterly Journal of Economics; Quarterly Review of Economics and Finance; Rand Journal of Economics; Review of Economic Studies; Review of Economics and Statistics; Review of Financial Economics; Scandinavian Journal of Economics; Southern Economic Journal; National*

Science Foundation; C.V. Starr Center for Applied Economics (New York University); Addison-Wesley Publishing Company; Ballinger Press; Cambridge University Press; Harvard Business School Press; MIT Press; W.W. Norton; Oxford University Press.

Associate Editor: Federal Reserve Bank of New York *Economic Policy Review*; *Journal of Industrial Economics*; *Journal of Small Business Finance*.

PUBLICATIONS AND PAPERS

Edited Volumes

Effects of Taxation on Multinational Corporations (with M. Feldstein and J.R. Hines), Chicago: University of Chicago Press, 1995.

Taxing Multinational Corporations (with M. Feldstein and J. R. Hines), Chicago: University of Chicago Press, 1995.

Studies in International Taxation (with A. Giovannini and J. B. Slemrod), Chicago: University of Chicago Press, 1993.

Financial Markets and Financial Crises, Chicago: University of Chicago Press, 1991.

Asymmetric Information, Corporate Finance, and Investment, Chicago: University of Chicago Press, 1990.

Textbook

Money, the Financial System, and the Economy, Reading: Addison-Wesley Publishing Company, 1st ed., 1994; 2nd ed., 1997.

Publications

Articles

"Fundamental Tax Reform and Corporate Finance" (with W.M. Gentry), in J.M. Poterba, ed., *Tax Policy and the Economy*, volume 12, Cambridge: MIT Press, 1998.

"Distributional Implications of Introducing a Broad-Based Consumption Tax" (with W.M. Gentry), in J.M. Poterba, ed., *Tax Policy and the Economy*, volume 11, Cambridge: MIT Press, 1997.

"How Different Are Income and Consumption Taxes?," *American Economic Review* 87 (May 1997).

"Tax Policy and Investment" (with K.A. Hassett), in A.J. Auerbach, ed., *Fiscal Policy: Lessons from Economic Research*, Cambridge: MIT Press, 1997.

"Capital-Market Imperfections and Investment," *Journal of Economic Literature*, forthcoming.

"Assessing the Effectiveness of Saving Incentives" (with J. Skinner), *Journal of Economic Perspectives*, 10 (Fall 1996): 73-90.